

## WHAT IS CLAIMED IS:

1. A method for preparing lactic acid fermented solution of mushroom comprising the steps of
  - 5 (a) preparing a mushroom ingredients-containing medium;
  - (b) inoculating lactic acid strain onto the medium;
  - (c) culturing the strain-inoculated medium; and
  - (d) aging the cultured medium.
- 10 2. The method according to claim 1, wherein the step (a) comprises the steps of i) obtaining mushroom ingredients from fruit bodies or mycelia of mushroom by grinding or extracting; ii) preparing a lactic acid bacteria medium; iii) heat-treating the ingredients-containing medium of mushroom at a temperature ranging 75 ° 110°C for 15-40 minutes; and iv) cooling the heat-treated medium to a temperature ranging
  - 15 35-40°C.
3. The method according to claim 1 or 2, wherein the mushroom is selected from the group consisting of *Agaricus blazei*, *Ganderma lucidum*, *Grifola frondosa*, *Elfvigia applanata*, *Pleurotus osteratus*, *Agaricus bisporus*, *Flammulina velutipes*, *Lentinus*
  - 20 *edodes* and *Cradyceps spp.*
4. The method according to claim 2, wherein the mushroom extract in step i) is *Ganderma lucidum* extract.
- 25 5. The method according to claim 2, wherein the mushroom ingredients in step i) are obtained from a mixture of *Lentinus edodes*, *Pleurotus osteratus* and *Ganderma lucidum*.
6. The method according to claim 2, wherein the lactic acid bacteria medium in step ii)
  - 30 consists of 0.1-10% by weight of mushroom ingredients, 1-50% by weight of defatted

milk, 0.1-20% by weight of sugar and the balance of purified water.

7. The method according to claim 1, wherein the strain in step (b) is inoculated in an amount of 1-10% by weight of lactic acid bacteria in cold storage or heat-treated lactic acid bacteria, based on the total weight of said mushroom ingredients-containing medium.
8. The method according to claim 7, wherein the strain to be inoculated is *Lactobacillus bulgaricus*.
9. The method according to claim 7, wherein the strain is heat-treated lactic acid bacteria.
10. The method according to claim 9, wherein the heat-treatment is carried out by placing a cold-stored strain in an incubator and incubating the strain till a temperature ranging 25-40°C.
11. The method according to claim 1, wherein the culturing is carried out within the range of 35-40°C for 3-20 hours.
12. The method according to claim 11, wherein the culturing is carried out for 3-6 hours.
13. The method according to claim 1, wherein the aging is carried out at a temperature ranging 3-5°C for 10-20 hours.
14. A lactic acid fermented solution of mushroom produced by the method according to any of claims 1 to 13.
15. The lactic acid fermented solution of mushroom according to claim 14, comprising effective ingredients for dropping blood sugar level.
16. The lactic acid fermented solution of mushroom according to claim 15, wherein the

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